

# 2023

## Green Bond Impact Report<sup>1</sup>

---

Industrial Bank Co., Ltd.

---

<sup>1</sup> *IB Green Bond Impact Report 2023* (the “2023 Report”) is drafted by Industrial Bank Co., Ltd. to fulfill the reporting requirement of IB’s Green Bonds (the “Bonds”) issued under the *Green Bond Framework for Industrial Bank Co., Ltd.* (the “Framework”).

# Table of Contents

Introduction & Green Finance Practice of IB.....	01
Green Bond Framework and Issuance.....	04
Impact Report Summary.....	06
Allocation of Proceeds.....	07
Eligible Projects Summary.....	09
Third-party Engagements, Disclosure and Reporting.....	11
Appendix 1: Impact Reporting Methodology.....	12
Appendix 2: List of Abbreviations.....	13

## Introduction: About IB

Industrial Bank Co., Ltd. (hereinafter referred to as Industrial Bank) was established in Fuzhou City, Fujian Province in 1988 with a registered capital of 20.774 billion yuan and listed on the Shanghai Stock Exchange in 2007 (stock code: 601166). It's one of the first joint-stock commercial banks approved by the State Council and the People's Bank of China, and it's also the first Equator Bank in China. Now it has grown into a mainstream commercial banking group with banking as its main business and multiple fields such as trust, financial lease, funds, futures, asset management, consumer finance, research and consulting, and digital finance covered, ranking among the top 20 banks in the world and Fortune Global 500.

### Banking as Its Main Business



Trust



Financial Lease



Funds



Futures



Asset Management



Consumer Finance



Research and Consulting



Digital Finance

## Green Finance Practice of IB

Chinese financial market has experienced a green shift since the declaration of carbon peaking and carbon neutrality goals. Major green finance instruments, including green loans and green bonds, have experienced significant growth in issuance. Policy guidance has never been clearer before as regulators unveiled dozens of policy tools, including the launch of carbon emission reduction facility (CERF) as well as the opening of national wide carbon trading market, to tilt funding into green industries. The Report to the 20<sup>th</sup> National Congress of the Communist Party of China (CPC) further emphasized “accelerating the transition to a model of green development”, which demonstrates the significance of financial policies and standards in promoting green transition, the strategic opportunities of green finance are coming.

As for IB, its effort to explore new paths of combining commercial banking with environmental considerations started over a decade ago. IB was the first commercial bank in China to fully embrace sustainable development and Green finance. The Bank announced the adoption of the Equator Principles in 2008, becoming the first bank in China that integrated an advanced international environmental and social risk management framework into its daily business. In China, as the Vice Secretary-General of the Green Finance Committee (GFC) established under China Financial Forum, the Bank has been proactively promoting Green finance as part of the national agenda, contributing to the drafting of several key policies.

In order to serve financing demands of its clients in environment friendly aspects, IB has innovatively mobilized its branches and subsidiaries to provide not only traditional loan financing, but also other types of financial tools, including debt underwriting, equity investment, financial leasing and asset securitization. In 2023, IB further put forward the requirements of "integrating green finance into all aspects" and "making all sectors greener", and aimed at the “all-green” transition of the whole group. The development of “Green Bank” will be prioritized and become the most eye-catching business card of IB.

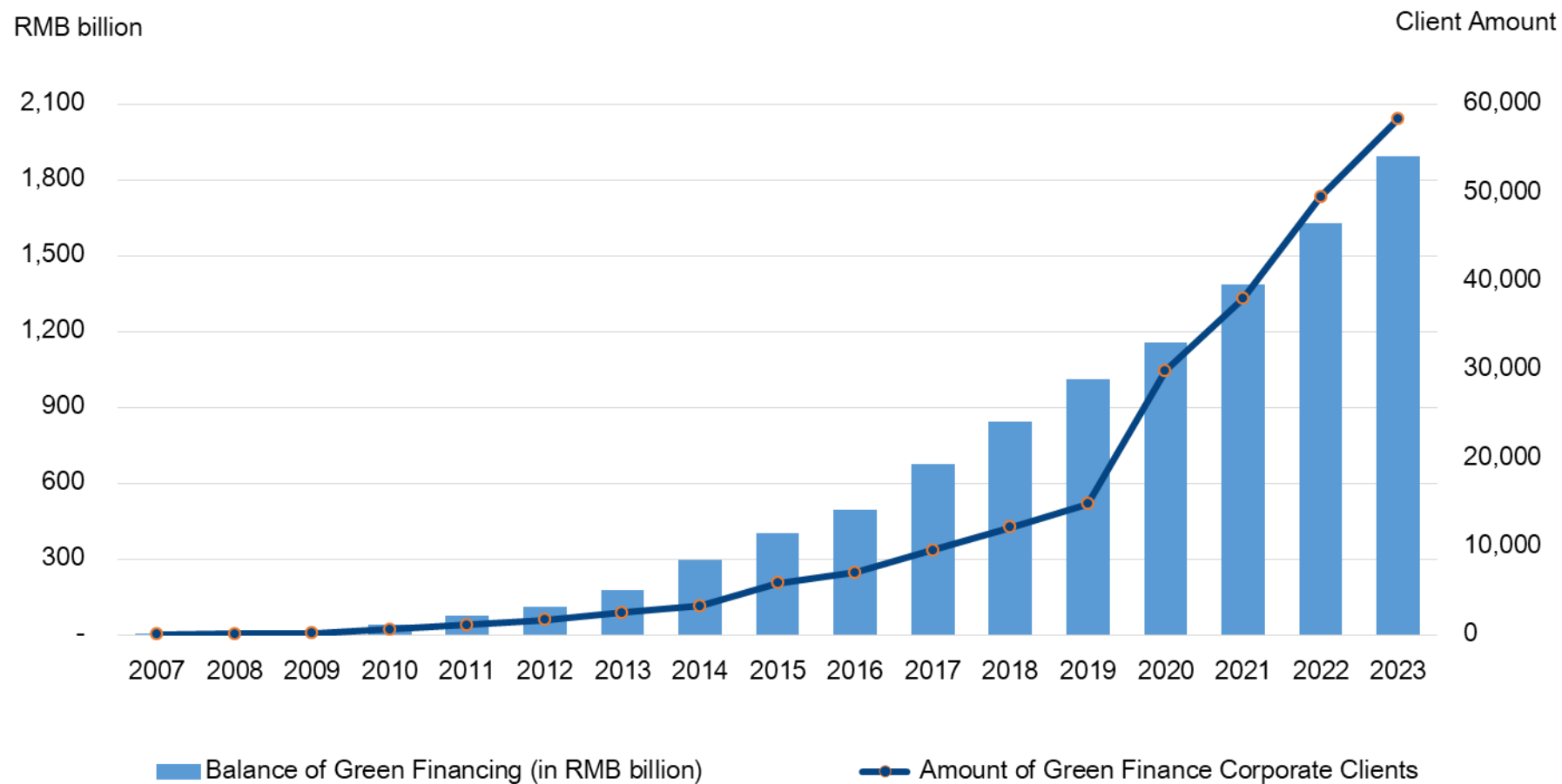
Being a first mover and a one-stop financial service provider in green finance, IB obtains significant return. In 2023, IB’s Green Financing Portfolio totaled **RMB 1.89 trillion<sup>2</sup>** and IB had **58347** Green Finance Corporate Clients.

Both figures have been growing at over **20% CAGR** since 2013.

---

<sup>2</sup> Including loans, debt investment, bond investment, financing leasing, managed class assets, and equity investment that aligned with IB’s green financing standards (the “IB green finance standards”). IB green finance standards is a series of self-developed standards which are drafted based on domestic and international green finance standards and industrial standards.

## Green Financing Portfolio and Amount of Green Finance Corporate Clients



## Green Bonds Issuance

IB treats green bonds as a further elaboration of the Bank's sustainable development strategy. They serve the purposes of providing long-term, stable fund for IB to finance its green projects as well as delivering the bank's consistent effort in Green Finance to its investors and support them to meet their goals in the expanding green economy.

IB issued the first Green finance bond in China in 2016. By the end of 2023, IB has two offshore green bonds listed in Hong Kong with a total face value of **USD 1.25 billion** and **HKD 2.50 billion**. Funds are raised to finance and refinance projects in renewable energy, energy efficiency, low carbon and low emission transportation, sustainable water and wastewater management, sustainable marine economy, marine environmental protection and coastal climate change adaption, and other industries that are included in Chinese domestic and international green bond standards.

### Green Bond Issued under *the Green Bond Framework for IB*

In 2018, IB announced *Green Bond Framework for Industrial Bank Co., Ltd.* (the "Framework") and updated it on October 2020 (Version 2020.10). The framework defines the use of proceeds, project evaluation and selection process, management of proceeds and reporting of IB's offshore green bonds.<sup>3</sup>

As of Dec 31<sup>st</sup> 2023, two offshore green bonds issued under the framework remains outstanding, which include three tranches with face values of USD 1.25 billion and HKD 2.50 billion.

---

<sup>3</sup> IB's domestically issued green financial bonds, which are traded on China Inter-Bank Bond Market, are not issued under the framework, and therefore not covered in this report. Domestically issued green bonds are subjected to green bonds regulatory requirements proposed by Chinese domestic financial regulators, including People's Bank of China (PBoC, 中国人民银行) and National Financial Regulatory Administration (NFRA, 国家金融监督管理总局). Corresponding green bond reports are posted on [www.chinabond.com.cn](http://www.chinabond.com.cn) as of regulatory requirements.

Bond Name	2021 "Carbon Neutrality" Themed Green Bond		2022 "China-EU Common Ground Taxonomy" Themed Green Bond
Issue Type	Senior Unsecured Bond		
Issue Format	Reg S		
Issue Rating	Baa2 (Moody's)		
ISIN	XS2345988211	HK0000732815	XS2447552089
Issue Date	2021/6/10	2021/6/10	2022/5/18
Maturity Date	2024/6/10	2024/6/10	2025/5/18
Issue	USD 3Y Fixed	HKD 3Y Fixed	USD 3Y Fixed
Size	USD \$600,000,000.00	HKD \$2,500,000,000.00	USD \$650,000,000.00
Issue Price	100	100	99.816 per cent. of the Aggregate Nominal Amount
Benchmark	/	/	/
Coupon Rate	0.875%	0.750%	3.25%
Listing Venue	HKEX	HKEX	HKEX
Use of Proceeds	To finance and/or refinance Eligible Green Assets with significant carbon emission reduction, as defined in the Green Bond Framework		The net proceeds will be used for the financing and/or refinancing of Eligible Green Assets in relation to wind and solar power generation projects as defined under the "Renewable Energy" and electrified rail and metro projects under the "Low Carbon and Low Emission Transportation" categories of the Green Bond Framework for Industrial Bank Co., Ltd
Total Proceeds Raised (in million USD) <sup>4</sup>	922.20		648.80
Allocated Proceeds as of Dec 31 2022 (in million USD)	922.20		648.80
Date of full allocation	2021 Q4		2022 Q4
% of proceeds allocated	100%		100%
Special features	"Carbon Neutrality" Themed Green Bond with use of proceeds focus on assets that have significant carbon emission reduction		"China-EU Common Ground Taxonomy" themed Green Bond with use of proceeds focus on assets that are in line with the prudent green standards set in the China-EU CGT, including low carbon and low emission transportation, and renewable energy

<sup>4</sup> Exchange rate applied: USD/HKD=0.1289 for 2021 issues

## Impact Report Highlights

### Renewable Energy Projects

**3** projects in progress



**206.40** MW renewable capacity from power generators

**636.82** GWh annual renewable energy generated

**14,115.00** tce avoided/saved

**38,292.68** tons of CO<sub>2</sub> emission equivalent avoided per year



**11.80** tons of SO<sub>2</sub> emission equivalent avoided per year

**11.35** tons of NO<sub>x</sub> emission equivalent avoided per year

**300** MW Copper Indium Gallium Diselenide Solar Cells (CIGS) and **5** GW monocrystalline silicon solar cells manufacturing capacity per year

### Low Carbon and Low Emission Transportation

**6** projects in progress



**214.39** km of track built

**1,836.28** million Passengers to be transported per year by 2045

**12**GW lithium EV power battery manufacturing capacity per year

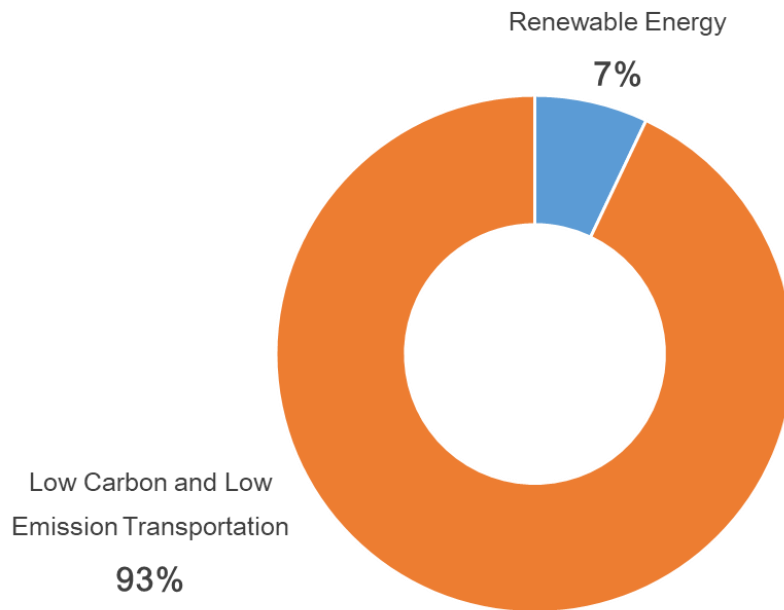




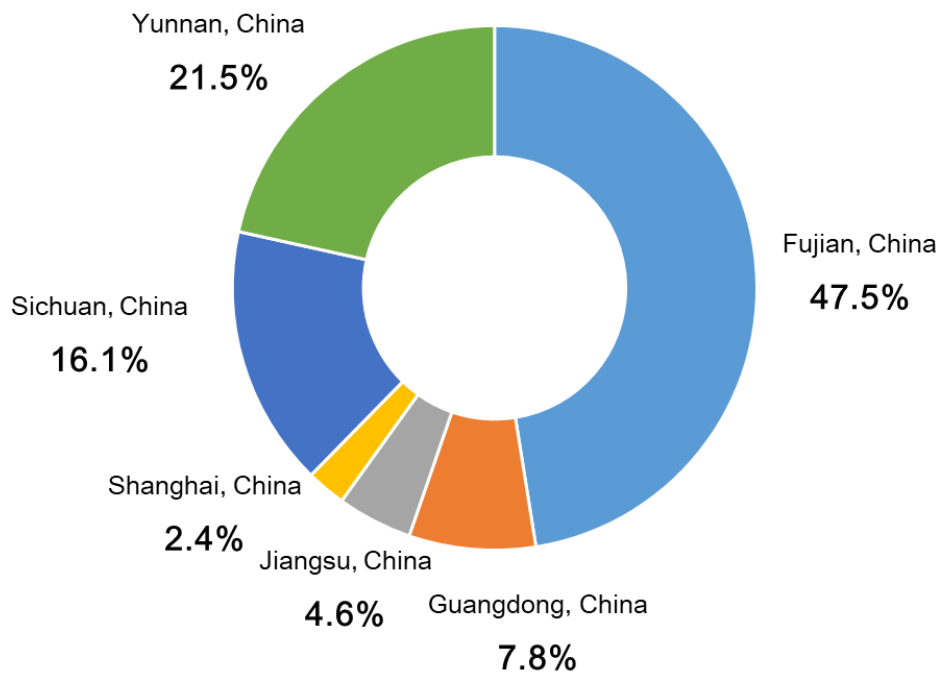
## Allocation of Proceeds

100.00% of the total fund raised by the Green Bonds, which is USD 1517.00 million worth, had been allocated to 3 Renewable Energy projects and 6 Low Carbon and Low Emission Transportation projects by Dec 31<sup>st</sup>, 2023. Unallocated proceeds during the year (if any) were kept in Industrial Bank's general account with no temporary investments.

### Allocation of Proceeds by Sector



### Allocation of Proceeds by Region



## Allocation of Proceeds by Sector and Region

2023 Ref. No	Type	Category	Location	Allocation	Financing Period <sup>5</sup>	Project Status	Allocated Amount (RMB million)	Allocated Amount (USD million eq.)
Project 1	Renewable Energy	Offshore Wind Power	Shanghai, China	2021 "Carbon Neutrality" Themed Green Bond	2021-2037	Fully operational	244.03	38.19
Project 2		Manufacture of solar cell and relevant equipment for solar energy	Jiangsu, China	2021 "Carbon Neutrality" Themed Green Bond	2021-2026	Fully operational	225.00	35.21
Project 3		Jiangsu, China	2021 "Carbon Neutrality" Themed Green Bond	2021-2026	Fully operational	240.00	37.56	
	<b>Subtotal</b>						709.03	110.95
Project 4	Low Carbon and Low Emission Transportation	Metro	Fujian, China	2021 "Carbon Neutrality" Themed Green Bond	2017-2047	Under construction	2,180.91	341.28
Project 5			Guangdong, China	2021 "Carbon Neutrality" Themed Green Bond	2021-2046	Under construction	783.30	122.57
Project 6			Fujian, China	2021 "Carbon Neutrality" Themed Green Bond	2021-2036	Fully operational	603.21	94.39
Project 7			Fujian, China	2022 "China-EU Common Ground Taxonomy" Themed Green Bond	2017-2047	Under construction	2,087.79	310.25
Project 8			Yunnan, China	2022 "China-EU Common Ground Taxonomy" Themed Green Bond	2020-2041	Fully operational	2,278.18	338.55
Project 9		Manufacture of power battery dedicated for EVs	Sichuan, China	2021 "Carbon Neutrality" Themed Green Bond	2020-2028	Fully operational	1,616.79	253.00
	<b>Subtotal</b>						9,550.18	1,460.05
	<b>Total Allocation</b>						10,259.21	1,571.00

<sup>5</sup> Financing Period refers to the years between financial close and mature of loans.

# Eligible Assets Summary

## Renewable Energy





Quantitative Relationships	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)=(i)*(g)	(l)	(m)=(l)*(g)	(n)	(o)=(n)* *(g)	(p)	(q)=(g)* (g)	(r)
	Asset Information			Proceeds Allocation				Impact Factors										
Ref. No & Reported level	Category	Location	Project Description	Total investment (RMB million)	Allocated Amount (RMB million)	Allocated Amount (USD million eq.)	IB current share	Generator Capacity (MW)	Annual Power Output (GWh)	Tce avoided (tons/yr)		CO <sub>2</sub> Emission Eq. avoided (tons/yr)		SO <sub>2</sub> Emission Eq. avoided (ton/yr)		NO <sub>x</sub> Emission Eq. avoided (tons/yr)		Other Impacts
	/	/	/	/	/	/	/	Project level	Project level	Project level	IB share	Project level	IB share	Project level	IB share	Project level	IB share	Project level
<b>Project 1</b>	Offshore Wind Power	Shanghai, China	This offshore wind power project locates in eastern China. The project plans to install 32 sets of 6.45MW wind power generator sets, one 220kV offshore booster station and one onshore central controlling station. The annual power output is 636.82 GWh with 3085 GEAH when running at full capacity.	3,402.48	244.03	38.19	7.17%	206.40	636.82	196,800.00	14,115.00	533,900.00	38,292.68	164.49	11.80	158.18	11.35	/
<b>Project 2</b>	Manufacture of solar cell and relevant equipment for solar energy	Jiangsu, China	The project financing supports the construction of a new solar cell manufacturing facility in Jiangsu. The facility aims to reach a capacity of manufacturing and assembling 300MW Copper Indium Gallium Diselenide Solar Cells (CIGS) per year.	526.95	225.00	35.21	42.70%	/	/	/	/	/	/	/	/	/	/	Capacity of manufacturing 300MW Copper Indium Gallium Diselenide Solar Cells (CIGS) per year
<b>Project 3</b>		Jiangsu, China	The project financing supports the construction of a new solar cell manufacturing facility in Jiangsu. The facility aims to reach a capacity of manufacturing and assembling 5GW monocrystalline silicon solar cells per year.	2,095.00	240.00	37.56	11.46%	/	/	/	/	/	/	/	/	/	/	Capacity of manufacturing 5GW monocrystalline silicon solar cells per year
<b>Total</b>	/	/	/	6,024.43	709.03	110.95	/	206.40	636.82	196,800.00	14,115.00	533,900.00	38,292.68	164.49	11.80	158.18	11.35	/

## Eligible Assets Summary

### Low Carbon and Low Emission Transportation

Quantitative Relationships	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
	Asset Information			Proceeds Allocation				Impact Factors			
Ref. No & Reported level	Category	Location	Project Description	Total investment (RMB million)	Allocated Amount (RMB million)	Allocated Amount (USD million eq.)	IB current share	Length of track (km)	Passenger Transported by 2020 (million/yr)	Passenger Transported by 2045 (million/yr)	Other Impacts
	/	/	/	/	/	/	/	Project level	Project level	Project level	Project level
Project 4	Metro	Fujian, China	This electrified urban metro project locates in one of the major coastal city in south-eastern China. The project is designed to connect the local high-speed railway station and the new city airport which is currently under construction. It is expected to benefit both local residence and regional travelers. The project is 36.7 km in length, which includes 29.2km underground section and 6.92km elevated section. The project also contains 26 stations. The transportation capacity is expected to reach 400 thousand passengers per day in 2023 and 910 thousand passengers per day in 2045.	29,133.84	2,180.91	341.28	7.49%	36.72	146.58	332.15	/
Project 5		Guangdong, China	This electrified urban metro project locates in one of the major coastal city in southern China. The project is 71.3 km in length, which includes 65.8km underground section, 4.8km elevated section and 0.7km transition section. The project also contains 36 stations. The metro project can offer a maximum transportation capacity of 34.5 thousand passengers per hour after it becomes fully operational.	41,987.00	783.30	122.57	1.87%	71.30	179.69	500.85	/
Project 6		Fujian, China	This electrified urban metro project locates in one of the major coastal city in south-eastern China. It is an all-underground rail traffic system with 26.265 km in length and contains 22 stations. The estimated transportation capacity is 753 thousand passengers per day after the project becomes fully operational.	14,960.00	603.21	94.39	4.03%	26.27	110.23	274.85	/
Project 7		Fujian, China	This electrified urban metro project locates in one of the major coastal city in south-eastern China. The project is designed to connect the local high-speed railway station and the new city airport which is currently under construction. It is expected to benefit both local residence and regional travelers. The project is 36.7 km in length, which includes 29.2km underground section and 6.92km elevated section. The project also contains 26 stations. The transportation capacity is expected to reach 400 thousand passengers per day in 2023 and 910 thousand passengers per day in 2045.	29,133.84	2,087.79	310.25	7.17%	36.72	146.58	332.15	/
Project 8		Yunnan, China	This electrified urban metro project, with 43.38 km in length, locates in one of the major city in west-southern China. The project contains 27 stations, which includes 23 underground stations and 4 elevated stations. The estimated transportation capacity is expected to reach 492.1 thousand passengers per day in 2023 and 1085.7 thousand passengers per day in 2045.	30,302.41	2,278.18	338.55	7.52%	43.38	/	396.28	
Project 9	Manufacture of power battery dedicated for EVs	Sichuan, China	The project financing supports the construction of a new lithium battery manufacturing facility locates in Sichuan. The facility aims to reach a capacity of manufacturing and assembling 12GW lithium EV power battery each year.	3,999.70	1,616.79	253.00	40.42%	/	/	/	12GW lithium EV power battery manufacturing capacity
<b>Total</b>	/	/	/	149,516.79	9,550.18	1,460.05	/	214.39	583.09	1,836.28	/

## Third-party Engagements, Disclosure and Reporting

  	<p><b>Framework SPO:</b></p> <p>IB has engaged Sustainalytics to act as an external reviewer and second-party opinion (“SPO”) provider of this Green Bond Framework (Version 2020.10) for <i>Green Bond Principles</i> (“GBP”) alignment. Sustainalytics finds the Framework to be “credible and impactful and aligns with the four core components of the Green Bond Principles 2018”.</p> <p>IB has also engaged Hong Kong Quality Assurance Agency (“HKQAA”) to provide SPO on the Framework. HKQAA has determined that the Framework is in accordance with the requirements of Green Bond Principles and the Common Ground Taxonomy.</p>
	<p><b>Pre-issuance Certifications:</b></p> <p>Green Bond issued in Jun 2021 has obtained HKQAA Green Finance Certification (Pre-issuance Stage).</p>
	<p><b>Post-issuance Certifications:</b></p> <p>IB has engaged Sustainalytics as an independent third party to provide <b>Assessment Reports</b> (the “Assessment Reports”) on allocation of proceeds and impacts of its offshore green bonds.</p>

The framework, Second Opinion report, Certifications, Verification Letter, Letter of Approving and Assessment Report are publicly available on IB’s website at:

<https://www.cib.com.cn/cn/GreenFinance/Reports/OffshoreGreenBond.html>

# Appendix 1: Impact Reporting Methodology

## Ex-ante Projections

Environmental impact data reported for IB's general green finance portfolio as well as green bond allocation are ex-ante estimations during project design mostly for direct project impacts once projects are at normal operating capacity. They are prepared using the combination of national standards and IB's self-developed methodology. IB commits to reflect the environmental effect of eligible assets at its best effort, but does not guarantee the accuracy of data and applicability of the methodologies.

## Regulations and Standards Applied

Environmental impacts are either directly extracted from or calculated by data provided in "Project feasible study reports (项目可行性研究报告)", which is prepared by professional third-parties as a prerequisite for all project investment according to national regulation. IB will only approve project financing whose feasible study reports as well as environmental impacts projections has been reviewed and approved by National and Local Development and Reform Commission (NDRC, 国家发展改革委员会) or other official agencies.

The calculation of environmental impacts based on "Project feasible study reports" has applied the following standards:

***Guidelines for Calculation Energy Saving and Emission Reduction for Green Credit Projects (绿色信贷项目节能减排量测算指引)*** by former China Banking and Insurance Regulatory Commission's (CBIRC, 原中国银行保险监督管理委员会)

***General Technical Rules for measurement and verification of energy saving GB\_T 28750-2012 (节能量测量和验证技术通则)*** and ***General Principles for calculation of the comprehensive energy consumption GB\_T 2589-2008 (综合能耗计算通则)*** by China Administration of Quality Supervision, Inspection and Quarantine (AQSIQ, 中国国家质量监督检验检疫总局).

The method involves calculation of baseline settings, absolute and relative emission, and is similar to EIB Carbon Footprint Methodology.

## Reporting for co-financed projects

IB usually co-finance projects with local business owners or other lenders. In order to reflect IB's participations in environmental benefits generated by these projects more accurately, IB reports environmental impacts at both project level and IB share level. Dividable impact factors, including tce saved/avoided, CO2 emission reduction, SO2 emission reduction and NOx emission reduction are reported at both project level and IB share level on a pro rata basis. IB share level is calculated by Project level impact result\*(Amount allocated/Total investment). Non-dividable impact factors, including generator capacity, annual power output, solar cells manufacturing capacity, length of tracks, passengers transported per year, EV power battery manufacturing capacity, length of river training, length of dam and levees, capacity of wastewater treatment capacity, and length of wastewater pipelines are reported at project level only.

## Appendix 2: List of Abbreviations

CBI	Climate Bond Initiative
CO <sub>2</sub>	Carbon dioxide
COD	Chemical oxygen demand
CIGS	Copper Indium Gallium Diselenide Solar Cells
eq.	Equivalent
EUR	Euro
EURIBOR	Euro Interbank Offered Rate
EV	Electric vehicle
FRN	Floating-Rate Note
GBP	Green Bond Principles
GEAH	Generating Equipment Availability Hours
GFC	China Green Finance Committee
GHE	Greenhouse effect
GHG	Greenhouse gas
GWh	Gigawatt hours (equal to 1,000 MWh or 1,000,000 kWh)
HKD	Hong Kong dollar
HKQAA	Hong Kong Quality Assurance Agency
IB, or Industrial Bank	Industrial Bank Co., Ltd.
km	Kilometers
km <sup>2</sup>	Square kilometers
kV	Kilovolts
kW	Kilowatt
kWh	Kilowatt hours
LIBOR	London Interbank Offered Rate
MTN	Medium Term Note
MW	Megawatts
MWh	Megawatts hours
NFRA	National Financial Regulatory Administration
NH <sub>3</sub> -n	Ammonia nitrogen
NO <sub>x</sub>	Nitrogen oxide
PBoC	People's Bank of China
Reg S	Regulation S
RMB	Renminbi
SO <sub>2</sub>	Sulfur dioxide
SPO	Second party opinion
tce	Tons of coal equivalent
USD	US dollar
yr	years



### **Green Finance Department**

Industrial Bank Co., Ltd.

Industrial Bank Tower, 398 Middle Jiangbin Blvd.,  
Taijiang District, Fuzhou, Fujian, 350014,  
P.R.China

### **Contact:**

**E:** [sfd@cib.com.cn](mailto:sfd@cib.com.cn)

**T:** +86-10-59886666-103367

**W:** [www.cib.com.cn](http://www.cib.com.cn)

We welcome your feedback and views on this report.

March 2024

### **Acknowledgements**

The report was prepared by the Green Bond Working Group in Industrial Bank's Green Finance Department and reviewed by its senior management.

All rights reserved, no duplication without permission.